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Amendment to the Claims

Claims 1 - 22. (Canceled)

23. (Currently amended): A bacterial cell ~~The bacterial cell of claim 21, further~~ comprising a first isolated nucleic acid molecule encoding a polypeptide having 2,5-diketo-D-gluconic acid (2,5-DKG) permease activity and at least 95% sequence identity to SEQ ID NO: 12 and an second isolated nucleic acid molecule encoding a polypeptide having 5-keto reductase activity, said polypeptide having at least 95% sequence identity to SEQ ID NO: 16, wherein said bacterial cell is deficient in endogenous 2,5-DKG permease activity.

Claims 24 – 35. (Canceled)

36. (Previously presented): A method of enhancing 2-keto-L-gulonic acid (2-KLG) production, comprising a) introducing an isolated nucleic acid molecule encoding a polypeptide having at least 95% sequence identity to SEQ ID NO: 12 into a bacterial cell which expresses an enzyme that catalyzes the conversion of 2,5-diketo-D-gluconic acid (2,5-DKG) to 2-KLG, b) allowing expression of the polypeptide encoded by said nucleic acid molecule and c) culturing the bacterial cell under suitable conditions to produce 2-KLG.

37. (Original): The method of claim 36, wherein said bacterial cell further expresses enzymes that catalyze the conversion of glucose to 2,5-DKG.

38. (Original): The method of claim 37, wherein said bacterial cell is deficient in endogenous 2-keto reductase activity.

39. (Original): The method of claim 36, wherein said bacterial cell is of the genus *Pantoea*.

40. (Original): The method of claim 36, further comprising converting said 2-KLG to ascorbic acid.

Claims 41 – 48. (Canceled)

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49. (Previously presented): The bacterial cell of claim 15, which is an *E. coli* cell.

50. (Canceled)

51. (Previously presented): The method of claim 36, wherein the nucleic acid molecule has the sequence of SEQ ID NO: 11 or a sequence having at least 95% sequence identity thereto.

52. (Previously presented): A method for increasing the transport of 2, 5 diketo-D-gluconic acid (2, 5 DKG) across a cell membrane into a bacterial host cell comprising a) introducing an isolated nucleic acid molecule into a bacterial host cell, wherein the nucleic acid molecule encodes a protein comprising at least 95% sequence identity to SEQ ID NO: 12 and said protein having 2,5 DKG permease activity, b) allowing expression of the protein and c) culturing the bacterial host cell under suitable conditions for the transport of 2,5-DKG into the bacterial host cell.

53. (Previously presented): The method according to claim 52, wherein the bacterial host cell is an *E. coli*, *Pantoea* or *Klebsiella* host cell.

54. (Canceled)

55. (Previously presented): The method according to claim 52, wherein the nucleic acid molecule has the sequence of SEQ ID NO: 11 or a sequence having at least 95% sequence identity thereto.

56. (Canceled)

57. (Currently amended): The method according to claim 36, wherein said polypeptide polypeptide has the sequence of SEQ ID NO: 12.

58. (Previously presented): The method according to claim 36, wherein the bacterial host cell is an *E. coli*, *Pantoea* or *Klebsiella* host cell.

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59. (Currently amended): The method according to claim 52, wherein said ~~polypetide~~ polypeptide has the sequence of SEQ ID NO: 12.

60. (Previously presented): The method according to claim 53, wherein the bacterial host cell is a *Klebsiella* cell.

61. (Currently amended): The method according to claim 53, wherein the bacterial host cell is an *E. coli* cell.

62. (Currently amended): The method according to claim 53, wherein the bacterial host cell is a *Pantoea* cell.

63. (Previously presented): The method according to claim 53, wherein the bacterial host cell is deficient in endogenous 2,5 DKG permease activity.

64. (Previously presented): The method according to claim 53, wherein the bacterial host cell further comprises a nucleic acid molecule encoding a polypeptide having 2-keto reductase activity and at least 95% sequence identity to SEQ ID NO: 14.

65. (Previously presented): The method according to claim 53, wherein the bacterial host cell further comprises an isolated nucleic acid molecule having 5-keto reductase activity and at least 95% sequence identity to SEQ ID NO: 16.

66. (Currently amended): The method according to claim 53, wherein the bacterial host cell expresses an enzyme that ~~catalyzed~~ catalyzes the conversion of 2,5-DKG to 2-keto-L-gulonic acid (2-KLG).

67. (Currently amended): The method according to claim 53, wherein the nucleic acid molecule encoding the protein having 2,5-DKG permease activity is operably linked to a lac promoter.

68. (New): The method of claim 36, wherein the nucleic acid molecule encodes a polypeptide having at least 98% sequence identity to SEQ ID NO: 12.

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69. (New): The method of claim 68, wherein the nucleic acid molecule encodes a polypeptide having at least 99% sequence identity to SEQ ID NO: 12.

70. (New): The bacterial cell of claim 23, wherein said cell is from the genus *Pantoea*.

71. (New): The bacterial cell of claim 23, wherein the first nucleic acid molecule encodes a polypeptide having at least 98% sequence identity to SEQ ID NO:12 and the second nucleic acid encodes a polypeptide having at least 98% sequence identity to SEQ ID NO:16.

72. (New): The method of claim 52, wherein the nucleic acid molecule encodes a polypeptide having at least 98% sequence identity to SEQ ID NO: 12.

73. (New): The method of claim 72, wherein the nucleic acid molecule encodes a polypeptide having at least 99% sequence identity to SEQ ID NO: 12.